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L4: Entry 2 of 2

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TITLE: Drainage pipe internal cleaner unit - has mobile frame with hose reel, hose guide and mobile hose feeding arrangement to insert hose into pipe

PATENT-ASSIGNEE:

ASSIGNEE

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CODE

HOMBN

PRIORITY-DATA: 1978NL-0011818 (December 4, 1978)

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/>	NL 7811818 A	January 31, 1980		000	
<input type="checkbox"/>	BE 879856 A	March 3, 1980		000	
<input type="checkbox"/>	DE 2947591 A	June 26, 1980		000	
<input type="checkbox"/>	DE 2947591 C	June 19, 1987		000	
<input type="checkbox"/>	DK 7905002 A	July 7, 1980		000	
<input type="checkbox"/>	FR 2443293 A	August 8, 1980		000	
<input type="checkbox"/>	GB 2037392 A	July 9, 1980		000	
<input type="checkbox"/>	GB 2037392 B	March 9, 1983		000	
<input type="checkbox"/>	IT 1124962 B	May 14, 1986		000	
<input type="checkbox"/>	NL 174118 B	December 1, 1983		000	

INT-CL (IPC): B08B 9/06; B09B 0/00; B65H 49/18; E02B 11/00

ABSTRACTED-PUB-NO: NL 7811818A

BASIC-ABSTRACT:

The mechanism for cleaning pipes, partic. drainage pipes comprises a mobile frame carrying a reel for a hose which can be inserted into the pipe, a hose guide, and block to feed the hose into the pipe.

The guide may consist of a tube through which the hose can be moved. The guide may be pivotable on the frame and movable by one or more cylinder actuators. The feeder may comprise friction wheels on either side of the hose, of which one can be driven, pref. by a hydraulic motor.

TITLE-TERMS: DRAIN PIPE INTERNAL CLEAN UNIT MOBILE FRAME HOSE REEL HOSE GUIDE MOBILE HOSE FEED ARRANGE INSERT HOSE PIPE

DERWENT-CLASS: P43 Q36 Q42

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(12) UK Patent Application (19) GB (11) 2 037 392 A

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B08B 9/06

(52) Domestic classification

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(56) Documents cited

GB 1507959

GB 1436739

GB 1349515

GB 1307252

GB 1276591

GB 1228372

(58) Field of search

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F2N

F2P

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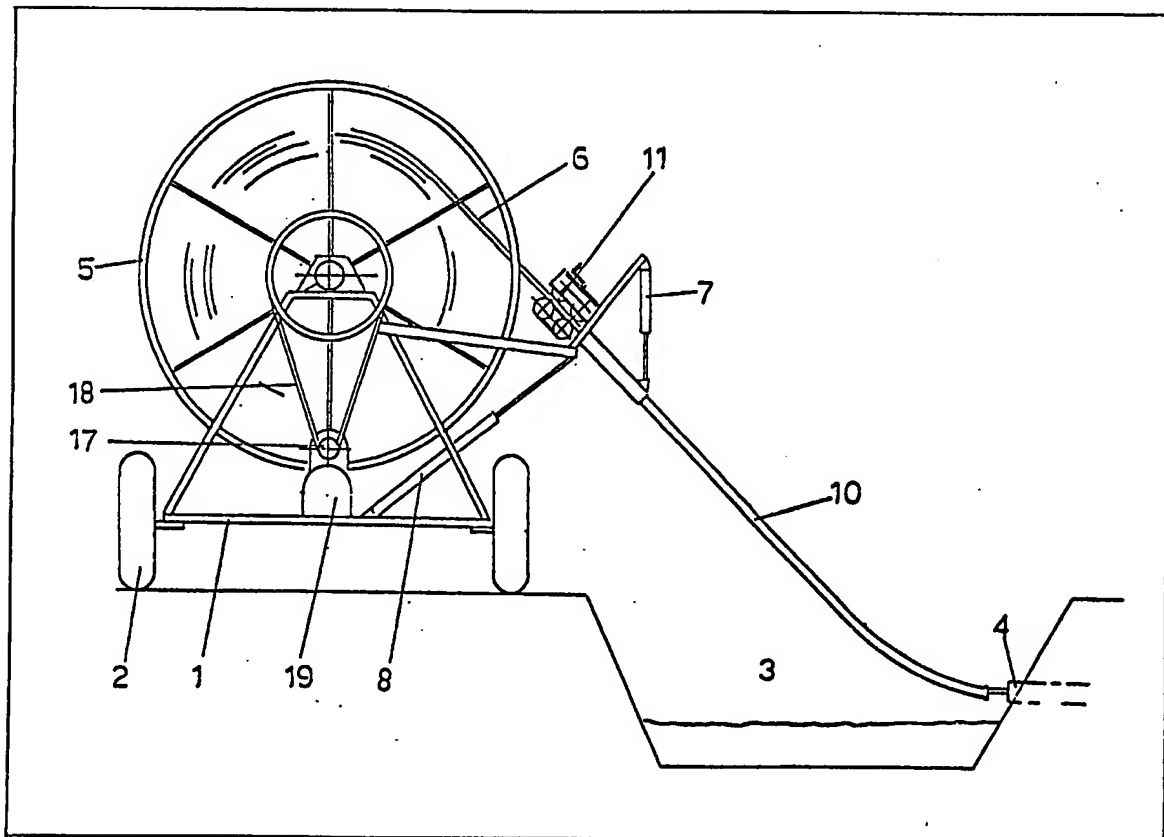
(74) Agents

Potts, Kerr & Co.

(54) Cleaning pipes

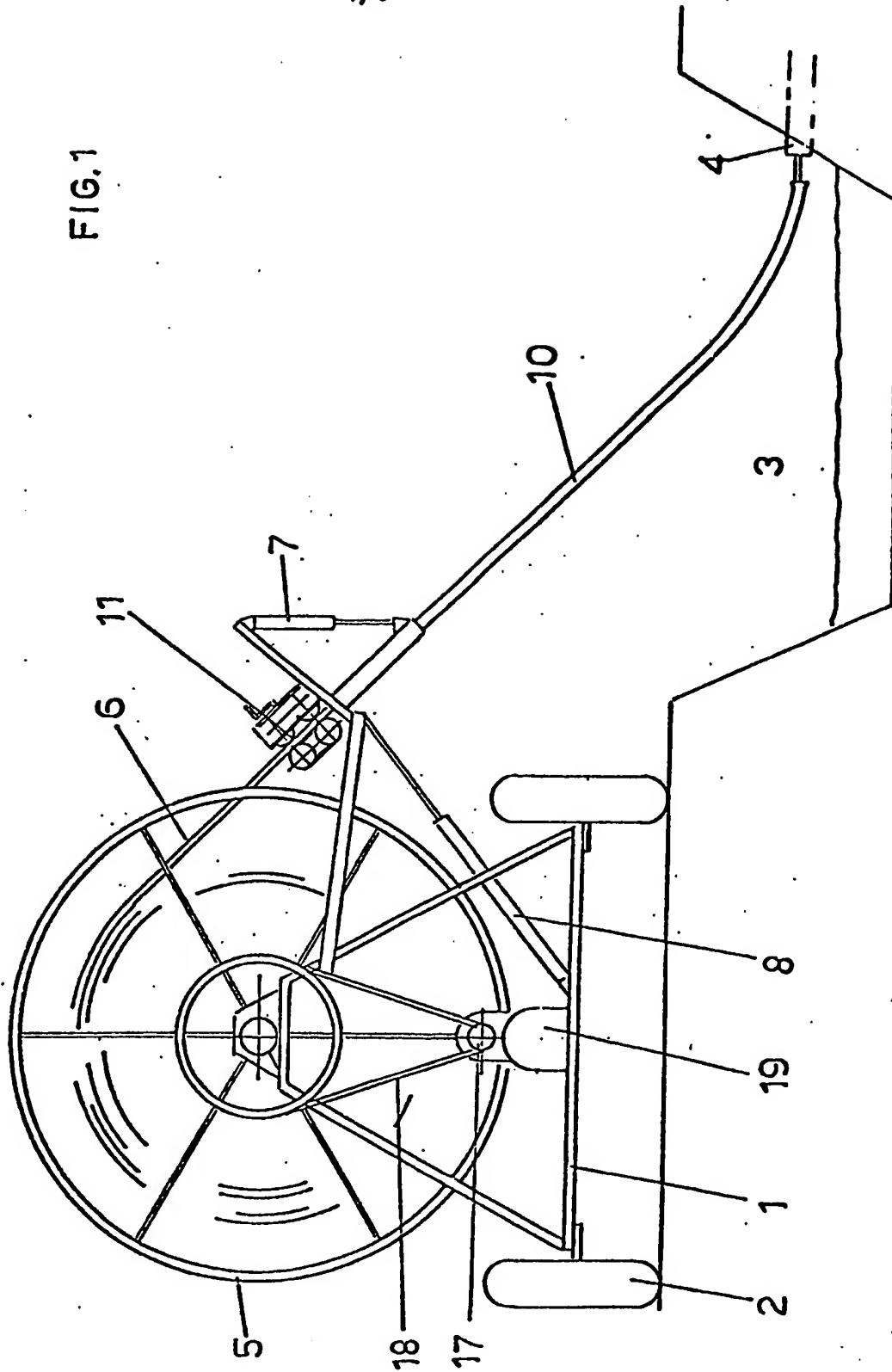
(57) An apparatus for flushing pipes,
in particular drain-pipes 4, formed by

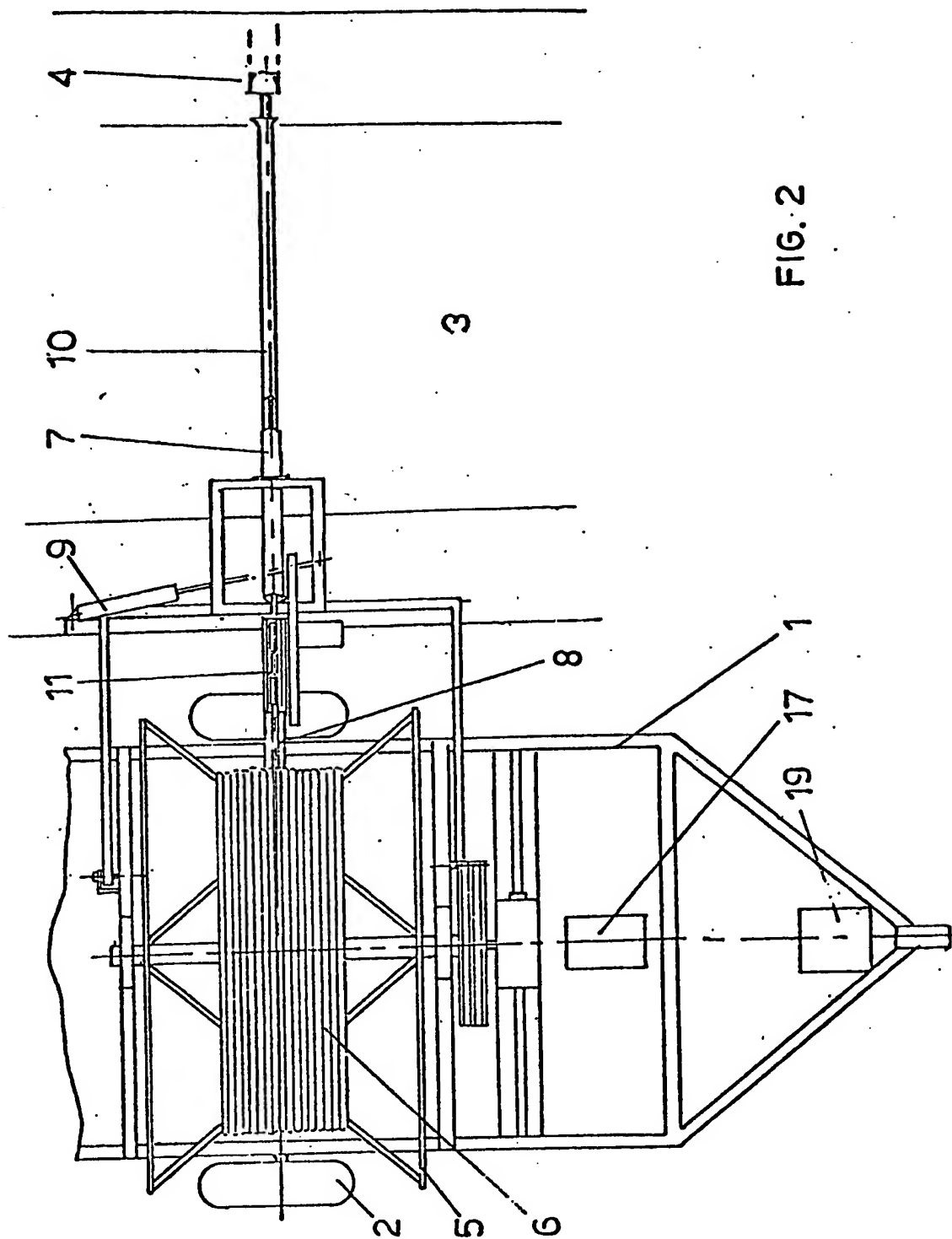
a frame 1 on which a reel 5 is
mounted for a hose 6 and being
provided with guiding means 10 for
introducing the hose 6 from the reel 5
into the pipe 4 to be flushed, whilst
along the path of movement of the
hose 6 at least one propulsion device
11 is arranged to move the hose 6.



GB 2 037 392A

FIG. 1





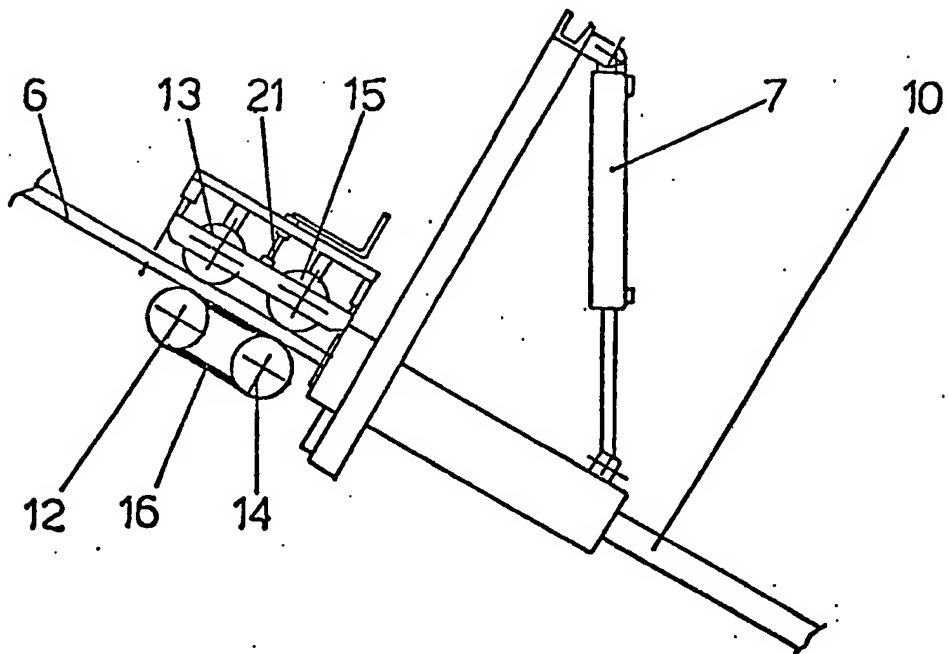


FIG. 3.

SPECIFICATION

An apparatus for flushing pipes, in particular drain-pipes

The present invention provides an apparatus
5 for flushing pipes, in particular drain-pipes.

Drain pipes, as applied into the soil to drain off
the land, gradually become silted up by solid
ground portions entrained to inside the pipe by the
drained-off water and so, it is necessary to flush
10 the drain-pipes from time to time to open and
clean same.

According to the known method, the flushing of
the drain-pipes is carried out by introducing by
hand a hose with a nozzle into the drain-pipe and
after which the drain-pipe is flushed whereby the
15 sludge in the pipe is dislodged and carried off to
the outside of the pipe against the direction of
movement of the hose in the pipe.

To introduce the flushing hose into the drain-
pipe and to move it on in the drain-pipe by hand is
20 very tiring and laborious.

It is an object of the present invention to
provide an apparatus for flushing pipes, in
particular drain-pipes.

25 According to a feature of the invention there is
provided a frame, particularly to be moved on in
arrear of a tractor and on which frame a reel is
mounted for a hose to be introduced into the pipes
to be flushed, said frame further being provided
30 with guiding means for the hose, whilst along the
path of movement of the hose at least one
propulsion device is arranged to move on the
hose.

The guiding means may be variously shaped.

35 According to a further feature of the invention,
the guiding means is formed by a guiding pipe
through which the hose may be moved on from
the reel and into the pipe to be flushed.

In an embodiment of the invented apparatus
40 the guiding pipe is mounted for movement with
respect to the frame and may be governed by one
or more hydraulic cylinders. The outlet of the
guiding pipe may be brought in front of the drain-
pipe to be flushed in a very simple manner by just
45 operating the governing valves of the hydraulic
cylinders, after which the cleaning hose may be
introduced from the guiding pipe into the drain-
pipe.

The propulsion device for the flushing hose may
50 be variously shaped.

According to a feature of the invention, the
propulsion device is formed by at least one pair of
friction wheels mounted on both sides of the path
of movement of the hose and at least partly
55 enclosing the path of movement, whilst at least
one friction wheel may be driven by a motor, in
particular a hydraulic motor.

In a very favourable embodiment of the
invented apparatus, the propulsion device is
60 formed by two pairs of friction wheels, spaced
from each other along the path of movement of
the hose, and between which at least one belt is
arranged to act upon the path of movement of the
hose.

65 In this embodiment of the invented apparatus,
the cleaning hose may be propelled through the
guiding pipe by both pairs of friction wheels as
well as by the belt arranged in between.

70 After cleaning the drain-pipe the hose is to be
pulled back from the drain-pipe and to be wound
onto the reel.

According to the invention there is provided a
motor, in particular a hydraulic motor to rotate the
reel.

75 The driving force, in the form of the pressure
fluid may be supplied by a traction in a known
manner.

The invention will now be described by way of
example with reference to the accompanying
80 drawings in which

Fig. 1 is a front view of the apparatus according
to the invention,

Fig. 2 is a top view of this apparatus, and

85 Fig. 3 is a view in enlarged scale of the
propulsion device for the flushing hose.

As is shown in the drawing, the apparatus
comprises a frame (1) which may be moved on on
wheels (2) by means of a tractor (not shown)
along a ditch (3) into which the drain-pipes (4) to
90 be flushed debouch.

On the frame (1) the reel (5) for the flushing
hose (6) is mounted and from which the hose may
be brought by the guiding pipe (10), which is
governed by means of the hydraulic cylinders (7),
95 (8) and (9), to the outlet of the drain-pipe and into
it.

Near the inlet of the guiding pipe (10) the
propulsion device (11) is arranged along the path
of movement of the cleaning hose.

100 As is shown more in particular in Fig. 3, the
propulsion device consists of two pairs of friction
wheels (12, 13) and (14, 15) and of which at least
one friction wheel may be driven by the hydraulic
motor (20).

105 Between the friction wheels (12) and (14) the
—V— belt (16) is arranged and by which the
propelling surface acting on the hose is increased.

As is further shown in Fig. 3, the distance of the
friction wheels, situated on both sides of the path
of movement of the hose, and thereby the gripping
on the hose may be regulated by means of the
110 screw-spindle (21).

The reel may be driven by means of the
hydraulic motor (17) and the belt (18) for pulling
back the hose from the flushed drain-pipe and
winding in onto the reel. The hose may be
supplied with the required flushing water by the
115 pump (19).

120 CLAIMS

1. An apparatus for flushing pipes, in particular
drain-pipes, characterized in that this apparatus is
formed by a frame, more in particular to be moved
on in arrear of a tractor, on which frame a reel is
125 mounted for a hose to be introduced into the pipes
to be flushed, said frame further being provided
with guiding means by means of which the hose
may be introduced in the pipe to be flushed, whilst

along the path of movement of the hose at least one propulsion device is arranged for moving on the hose through the pipe to be flushed.

5 2. An apparatus as claimed in claim 1, characterized in that the guiding means is formed by a guiding pipe through which the hose may be brought.

10 3. An apparatus as claimed in claim 2, characterized in that the guiding pipe is mounted for movement with respect to the frame of the apparatus and may be governed by means of one or more hydraulic cylinders.

15 4. An apparatus as claimed in claim 1, 2 or 3, characterized in that the propulsion device for the hose is formed by at least one pair of friction wheels arranged on both sides of the path of movement of the hose and at least partly

20 enclosing this path of movement, whilst at least one friction wheel may be driven by a motor, in particular a hydraulic motor.

25 5. An apparatus as claimed in one of the preceding claims, characterized in that the propulsion device is formed by two pairs of friction wheels spaced from each other along the path of movement of the hose and between which at least one belt is arranged.

30 6. An apparatus as claimed in one of the preceding claims, characterized in that the reel may be driven by a motor, in particular a hydraulic motor.

7. An apparatus for flushing pipes substantially as herein described with reference to the accompanying drawing.